(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/001121 A1

(51) International Patent Classification[7]: C12Q 1/68, C12M 1/34, G01N 33/48

(21) International Application Number: PCT/AU2004/000865

(22) International Filing Date: 30 June 2004 (30.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003903295 30 June 2003 (30.06.2003) AU

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

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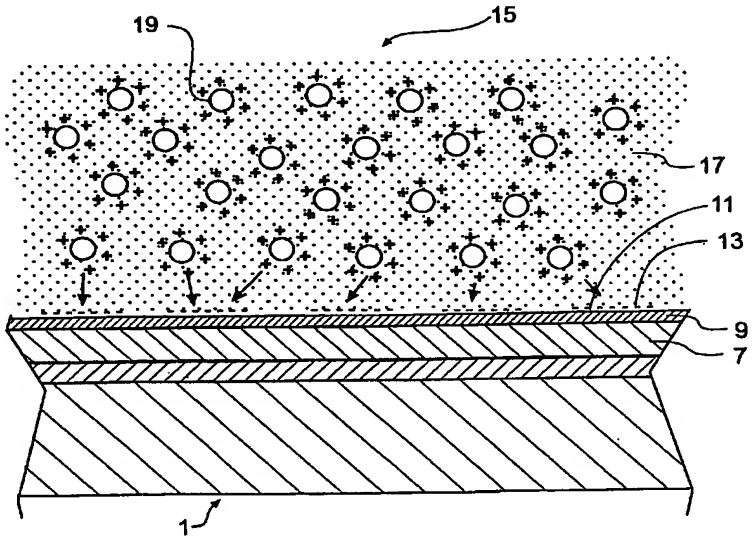
(54) Title: SUBSTRATES FOR SPATIALLY SELECTIVE MICRON AND NANOMETER SCALE DEPOSITION AND COMBINATORIAL MODIFICATION AND FABRICATION



(57) Abstract: A substrate (1) for spatially selective micron and nanometer scale deposition and/or reaction, which has a support (3), a conductive layer (5) on the support, a dielectric layer (7) to hold an electrostatic charge pattern such as a photoconductive layer of a material which dissipates an electric charge upon receiving incident radiation thereon, and a chemically functional layer (9), such that electrostatic charge patterns may be formed in a predetermined manner upon the substrate to influence the movement of charged droplets in an emulsion (15) on the substrate. The chemically functional layer either provides a surface for chemical functionalisation of the substrate or prevents access or reaction to the dielectric or photoconductive layer.

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